FILE 'REGISTRY' ENTERED AT 12:39:48 ON 26 JAN 2008

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 23 S L1 FUL

FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 12:42:58 ON 26 JAN 2008

L4 27 S L3

L5 6 S L2

L6 27 S L5 OR L4

L7 11623 S COPD OR CHRONIC (W) OBSTRUCTIVE (W) LUNG

L8 1 S L7 AND L6

FILE 'CAPLUS' ENTERED AT 12:56:46 ON 26 JAN 2008

E COPD/CT

E CHRONIC OBSTRUCTIVE LUNF DISEASE/CT

E E17+ALL

L9 5959 S E26

L10 1 S L9 AND L6

E E17+ALL

FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 13:53:43 ON 26 JAN 2008

SAV L5 C10565828/A

FILE 'HOME' ENTERED AT 13:53:56 ON 26 JAN 2008

FILE 'CAPLUS' ENTERED AT 14:11:38 ON 26 JAN 2008

=> S L3

L11 14 L3

## => E EMPHYSEMA/CYT

'CYT' IS NOT A VALID EXPAND FIELD CODE FOR FILE 'CAPLUS' The indicated field code is not available for EXPAND in this file. To see a list of valid EXPAND field codes, enter HELP SFIELDS at an arrow prompt (=>).

### => E EMPHYSEMA/CT

E#	FREQUENCY	AT		TERM
E89	1	9		EMPHOROPSIS MISERABILIS/CT
E90	0	1		EMPHYLLOCALYX/CT
E91	2795	12	>	EMPHYSEMA/CT
E92	0	2		EMPHYSEMA (L) PULMONARY/CT
E93	51	2		EMPHYSEMA (PULMONARY)/CT
E94	0	9		EMPHYTUS/CT
E95	1	9		EMPHYTUS CINCTUS/CT
E96	0	9		EMPIDADELPHA/CT
E97	1	9		EMPIDADELPHA SOBRINA/CT
E98	9	66		EMPIDIDAE/CT
E99	2	7		EMPIDOIDEA/CT
E100	0	1		EMPIDOKYREA/CT

# => E E91/+ALL

'+ALL' IS NOT A VALID EXPAND FIELD CODE FOR FILE 'CAPLUS'
The indicated field code is not available for EXPAND in this
file. To see a list of valid EXPAND field codes, enter HELP
SFIELDS at an arrow prompt (=>).

```
=> E E91+ALL
      37387 BT4 Disease, animal/CT
E101
                BT3 Diseases, by body part (non-CA heading)/CT
          0
E102
                   BT2 Organ, animal, disease/CT
E103
          645
                  BT3 Disease, animal/CT
E104
        37387
                    BT2 Respiratory system, disease/CT
       11342
E105
                      BT1 Lung, disease/CT
E106
       27977
                        --> Emphysema/CT
E107
        2795
                          HNTE Valid heading during volume 1 (1907) to
                               present.
                          OLD Emphysema (L) pulmonary/CT
E108
E109
           51
                          OLD Emphysema (pulmonary)/CT
                          UF
                               Chronic emphysema/CT
E110
                               Chronic obstructive emphysema/CT
E111
                          UF
                               Pulmonary emphysema/CT
E112
                          UF
******* END ******
=> S E91
L12 2795 EMPHYSEMA/CT
=> S L11 AND L12
L13
            1 L11 AND L12
=> D HIS
     (FILE 'HOME' ENTERED AT 12:39:35 ON 26 JAN 2008)
    FILE 'REGISTRY' ENTERED AT 12:39:48 ON 26 JAN 2008
               STRUCTURE UPLOADED
L1
             2 S L1
L2
            23 S L1 FUL
L3
     FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 12:42:58 ON 26 JAN
     2008
L4
            27 S L3
             6 S L2
L5
            27 S L5 OR L4
L6
         11623 S COPD OR CHRONIC (W) OBSTRUCTIVE (W) LUNG
L7
             1 S L7 AND L6
L8
     FILE 'CAPLUS' ENTERED AT 12:56:46 ON 26 JAN 2008
               E COPD/CT
               E CHRONIC OBSTRUCTIVE LUNF DISEASE/CT
               E E17+ALL
L9
          5959 S E26
L10
             1 S L9 AND L6
               E E17+ALL
     FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 13:53:43 ON 26 JAN
     2008
               SAV L5 C10565828/A
     FILE 'HOME' ENTERED AT 13:53:56 ON 26 JAN 2008
     FILE 'CAPLUS' ENTERED AT 14:11:38 ON 26 JAN 2008
             14 S L3
L11
               E EMPHYSEMA+ALL/CT
               E EMPHYSEMA+ALL/CT
               E EMPHYSEMA+ALL/CT
               E EMPHYSEMA+ALL/CT
```

E EMPHYSEMA+ALL/CT

E EMPHYSEMA/CT

E E91+ALL

L12 2795 S E91

L13 1 S L11 AND L12

=> S L13 OR L10 OR L8

L14 2 L13 OR L10 OR L8

=> D HIS IABS IBIB HITSTR 1-2

'IABS' IS NOT VALID HERE

For an explanation, enter "HELP DISPLAY HISTORY".

=> D IABS IBIB KWIC HITSTR 1-2

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN GRAPHIC IMAGE:

#### ABSTRACT:

The invention relates to an inhalant composition for treatment of respiratory disease, characterized by containing 7-aminoquinolinone derivative I (R1 = H, alkyl; R2, R3 = H, acyl, alkyl, and alkenyl; and R4, R5 = H, acyl, alkyl, alkenyl, aralkyl) or a physiol. acceptable salt of the derivative as an active component. The effect of inhalation of a compound I (R1 = methyl; R2 = octyl; R3, R4 = H, R5 = 3,5-dimethoxy-4-hydroxycinnamoyl) in asthma model guinea pigs was examined

ACCESSION NUMBER: 2005:405060 CAPLUS <<LOGINID::20080126>>

DOCUMENT NUMBER: 142:435822

TITLE: Inhalant compositions containing 7-aminoquinolinone

derivatives

INVENTOR(S): Takagaki, Shuji; Kimura, Nobuyuki; Aoki, Yasuo;

Ishihara, Mitsuteru

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan .

SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005119976	$\mathbf{A}^{\cdot}$	20050512	JP 2003-353544	20031014
PRIORITY APPLN. INFO.:	•		JP 2003-353544	20031014

OTHER SOURCE(S): MARPAT 142:435822

IT Allergy inhibitors
Antiasthmatics
Asthma

### Emphysema

Pneumonia

Respiratory system, disease

(inhalant compns. containing 7-aminoquinolinone derivs. for treatment of respiratory disease)

IT 194037-05-3 194037-25-7 194037-30-4

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(inhalant compns. containing 7-aminoquinolinone derivs. for treatment of respiratory disease)

IT 194037-25-7 194037-30-4

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(inhalant compns. containing 7-aminoquinolinone derivs. for treatment of respiratory disease)

RN 194037-25-7 CAPLUS

CN 2-Propenamide, N-[1,2-dihydro-4-hydroxy-1-methyl-3-(octyloxy)-2-oxo-7-quinolinyl]-3-(4-hydroxy-3,5-dimethoxyphenyl)- (CA INDEX NAME)

RN 194037-30-4 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-1-methyl-3-(octyloxy)-7-(2-propenylamino)-(9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2 - NH$$
 $O = CH_2 - NH$ 
 $O = CH_2 - NH$ 

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN ABSTRACT:

A therapeutic agent for chronic obstructive pulmonary diseases which contains as an active ingredient at least either of a 7-aminoquinolinone derivative represented by the general formula (I) (wherein R1 is hydrogen or alkyl; R2 and R3 each is a member selected among hydrogen, acyl, alkyl, and alkenyl; and R4 and R5 each is a member selected among hydrogen, acyl, alkyl, alkenyl, and aralkyl) or a physiol. acceptable salt of the derivative

ACCESSION NUMBER:

DOCUMENT NUMBER:

142:191276

```
Therapeutic agent for chronic obstructive pulmonary
TITLE:
                        disease and method of treatment for chronic
                        obstructive pulmonary disease with the same
                        Takagaki, Hidetsugu; Aoki, Yasuo; Ishiwara, Mitsuteru;
INVENTOR(S):
                        Mizutani, Nobuaki
                        Dainippon Ink and Chemicals, Inc., Japan
PATENT ASSIGNEE(S):
                        PCT Int. Appl., 49 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                        KIND
                               DATE
                                         APPLICATION NO.
                                                                 DATE
                                          -----
     _____
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                               -----
                               20050210 WO 2004-JP11013
    WO 2005012251
                        A1
                                                                 20040727
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            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
            NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
            TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
     JP 2005060365
                         Α
                               20050310
                                        JP 2004-72488
                                                                  20040315
                               20050210
                                          AU 2004-261527
                                                                 20040727
     AU 2004261527
                         A1
                                         CA 2004-2533919
EP 2004-771118
     CA 2533919
                         A1
                               20050210
                                                                 20040727
                               20060426
                                                                 20040727
     EP 1650191
                         A1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                              20060906 CN 2004-80021713
                                                                 20040727
     CN 1829693
                        Α
     US 2006235045
                               20061019
                                          US 2006-565828
                                                                 20060125
                         A1
PRIORITY APPLN. INFO.:
                                           JP 2003-203699
                                                             A 20030730
                                                             W 20040727
                                           WO 2004-JP11013
IT
     Lung, disease
        (chronic obstructive pulmonary
        disease; 7-aminoquinolinone derivs. as therapeutic agents for
        chronic obstructive pulmonary
        disease and method of treatment for chronic
        obstructive pulmonary disease with the
        same)
                 194037-03-1 194037-05-3 194037-06-4
IT
     194036-90-3
     194037-20-2 194037-25-7 194037-27-9 194037-33-7
     835905-51-6 835905-52-7 835905-53-8 835905-54-9
                                                            835905-55-0
                  835905-57-2 835905-58-3
                                              835905-59-4
                                                            835905-60-7
     835905-56-1
     835905-61-8 835905-62-9 835905-63-0 835905-64-1
     835905-65-2 835905-66-3 835905-67-4 835905-68-5 835905-69-6
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (7-aminoquinolinone derivs. as therapeutic agents for chronic
        obstructive pulmonary disease and method of treatment for chronic
        obstructive pulmonary disease with the same)
IT
     194037-06-4 194037-25-7 194037-33-7
     835905-62-9
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
```

(7-aminoquinolinone derivs. as therapeutic agents for chronic

obstructive pulmonary disease and method of treatment for chronic obstructive pulmonary disease with the same)

RN 194037-06-4 CAPLUS

CN 2(1H)-Quinolinone, 7-amino-4-hydroxy-1-methyl-3-(octyloxy)- (CA INDEX NAME)

RN 194037-25-7 CAPLUS

CN 2-Propenamide, N-[1,2-dihydro-4-hydroxy-1-methyl-3-(octyloxy)-2-oxo-7-quinolinyl]-3-(4-hydroxy-3,5-dimethoxyphenyl)- (CA INDEX NAME)

RN 194037-33-7 CAPLUS

CN Benzamide, N-[1,2-dihydro-4-hydroxy-1-methyl-3-(octyloxy)-2-oxo-7-quinolinyl]- (CA INDEX NAME)

$$\begin{array}{c|c}
O & Me \\
\parallel & & \\
Ph-C-NH & N & O
\end{array}$$

$$O-(CH_2)_7-Me$$

RN 835905-62-9 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-1-methyl-7-(octylamino)-3-(octyloxy)- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D HIS

(FILE 'HOME' ENTERED AT 12:39:35 ON 26 JAN 2008)

FILE 'REGISTRY' ENTERED AT 12:39:48 ON 26 JAN 2008

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 23 S L1 FUL

FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 12:42:58 ON 26 JAN 2008

L4 27 S L3

L5 6 S L2

L6 27 S L5 OR L4

L7 11623 S COPD OR CHRONIC (W) OBSTRUCTIVE (W) LUNG

L8 1 S L7 AND L6

FILE 'CAPLUS' ENTERED AT 12:56:46 ON 26 JAN 2008

E COPD/CT

E CHRONIC OBSTRUCTIVE LUNF DISEASE/CT

E E17+ALL

L9 5959 S E26

L10 1 S L9 AND L6 E E17+ALL

FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 13:53:43 ON 26 JAN

SAV L5 C10565828/A

FILE 'HOME' ENTERED AT 13:53:56 ON 26 JAN 2008

FILE 'CAPLUS' ENTERED AT 14:11:38 ON 26 JAN 2008

L11 14 S L3

2008

E EMPHYSEMA+ALL/CT

E EMPHYSEMA+ALL/CT

E EMPHYSEMA+ALL/CT

E EMPHYSEMA+ALL/CT

E EMPHYSEMA+ALL/CT

E EMPHYSEMA/CT

E E91+ALL

L12 2795 S E91

L13 1 S L11 AND L12

L14 2 S L13 OR L10 OR L8

=> SAV ALL S10565828A/L

=> SAV L14 C10565828B/A

=> S (LUNG OR PULMONARY ) AND L11

209066 LUNG 45755 LUNGS 224086 LUNG

(LUNG OR LUNGS)

98466 PULMONARY
2 PULMONARIES
98466 PULMONARY

(PULMONARY OR PULMONARIES)

L15 3 (LUNG OR PULMONARY ) AND L11

=> S L15 NOT L14

L16 2 L15 NOT L14

=> D IABS IBIB KWIC HITSTR 1-2

L16 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN ABSTRACT:

TA-270 is a novel compound that demonstrates 5-lipoxygenase(LO) inhibition and anti-oxidative action against ONOO- etc. TA-270 was designed on the basis of the ascorbic acid and aspirin, and added with sinapinic acid (an active ingredient of SAIBOKUTOU). Here, we investigated the effects of TA-270 on inflammatory airway diseases using exptl. guinea pig models. In a pre-clin. study, TA-270 strongly improved biphasic asthmatic responses and hyperresponsiveness in allergic asthma models, hyperresponsiveness induced by ozone inhalation in non-allergic models and also biphasic nasal blockages in allergic rhinitis models. The inhibitory effect of TA-270 against the hyperresponsiveness in allergic models was remarkably stronger than that of a cysteinyl leukotriene antagonist, suggesting that the anti-oxidative action rather than 5-LO inhibitory effect contributes to the inhibitory effect of TA-270. It is recently reported that a potent oxidant ONOO- generated from nitric oxide and O2- is involved in the development of respiratory diseases. And our study showed that TA-270 inhibited hyperresponsiveness induced by ONOOin quinea pigs. These results suggest that the anti-oxidative action of TA-270 is involved in the improvement of airway inflammation. In conclusion, TA-270 is considered to improve airway inflammation through its mechanism of 5-LO inhibitory and anti-oxidative effect, and is expected clin. to demonstrate improvement in airway inflammation including asthma and chronic obstructive \*\*\*pulmonarv\*\*\* disease, and allergic rhinitis.

ACCESSION NUMBER: 2006:42159 CAPLUS <<LOGINID::20080126>>

DOCUMENT NUMBER: 144:246944

TITLE: Effect of a novel quinolinone derivative, TA-270, on

inflammatory airway diseases

AUTHOR(S): Mizutani, Nobuaki; Ishiwara, Mitsuteru; Suetake,

Kazumi; Aoki, Yasuo; Takagaki, Hidetsugu

CORPORATE SOURCE: Dainippon Ink and Chemicals, Incorporated Central

Research Laboratories, Japan

SOURCE: Ensho, Saisei (2005), 25(6), 512-516

CODEN: ENSHCC; ISSN: 1346-8022

PUBLISHER: Nippon Ensho-Saisei Igakkai

DOCUMENT TYPE: Journal LANGUAGE: Japanese

AB . . . 5-LO inhibitory and anti-oxidative effect, and is expected clin. to demonstrate improvement in airway inflammation including asthma and chronic obstructive *pulmonary* disease, and allergic rhinitis.

IT 194037-25-7, TA-270

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effect of novel quinolinone derivative, TA-270, on inflammatory airway diseases)

IT 194037-25-7, TA-270

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effect of novel quinolinone derivative, TA-270, on inflammatory airway diseases)

RN 194037-25-7 CAPLUS

CN 2-Propenamide, N-[1,2-dihydro-4-hydroxy-1-methyl-3-(octyloxy)-2-oxo-7-quinolinyl]-3-(4-hydroxy-3,5-dimethoxyphenyl)- (CA INDEX NAME)

L16 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN ABSTRACT:

TA-270 (4-hydroxy-1-methyl-3-octyloxy-7-sinapinoylamino-2(1H)-quinolinone), a novel quinolinone derivative, was designed as an antioxidant to scavenge reactive oxygen species. Here, we investigated the effects of TA-270, in comparison with several antiasthmatic drugs, on asthmatic responses as induced by ovalbumin in sensitized guinea pigs. When orally administered 1 h before and 3 h after the antigen challenge, TA-270 at 10 mg/kg and higher doses significantly inhibited both immediate and late responses in airway resistance induced by the antigen. The inhibitory effects were comparable to or superior, at least under the present exptl. conditions, to those of several clin. used antiasthmatic drugs. Furthermore, TA-270, in a dose-dependent manner, reduced accumulation of pulmonary inflammatory cells, especially eosinophils, and significantly reversed the airway hyperresponsiveness to acetylcholine 24 h after the antigen challenge. These results suggest that TA-270 may be of therapeutic use for bronchial asthma.

ACCESSION NUMBER: 2000:854267 CAPLUS <<LOGINID::20080126>>

DOCUMENT NUMBER: 134:202566

TITLE: Inhibitory effect of a novel quinolinone derivative,

TA-270, on asthmatic inflammatory responses in

sensitized guinea pigs

AUTHOR(S): Aoki, Y.; Ishiwara, M.; Koda, A.; Takagaki, H. CORPORATE SOURCE: Central Research Laboratories, Dainippon Ink and

Central Research Laboratories, Dainippon Ink and Chemicals, Inc., Sakura, Chiba, 285-8668, Japan

SOURCE: European Journal of Pharmacology (2000), 409(3),

325-330

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

AB . . . present exptl. conditions, to those of several clin. used antiasthmatic drugs. Furthermore, TA-270, in a dose-dependent manner,

reduced accumulation of <u>pulmonary</u> inflammatory cells, especially eosinophils, and significantly reversed the airway hyperresponsiveness to acetylcholine 24 h after the antigen challenge. These results. . .

IT 194037-25-7, TA 270

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitory effect of a novel quinolinone derivative, TA-270, on asthmatic inflammatory responses in sensitized guinea pigs)

IT 194037-25-7, TA 270

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitory effect of a novel quinolinone derivative, TA-270, on asthmatic inflammatory responses in sensitized guinea pigs)

RN 194037-25-7 CAPLUS

CN

2-Propenamide, N-[1,2-dihydro-4-hydroxy-1-methyl-3-(octyloxy)-2-oxo-7-quinolinyl]-3-(4-hydroxy-3,5-dimethoxyphenyl)- (CA INDEX NAME)